



# LEWIS & CLARK CITY-COUNTY Health Department

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## **From Your Garden to Your Table – the Healthy Way**

**By Melanie Reynolds**

Gardening is a wonderful way to commit to better health.

Gardens offer a haven from stress, a chance to exercise, and a bounty of wholesome fruits and vegetables – all of which can reduce your risk of chronic diseases like cancer, diabetes, and heart disease. Just keep in mind: When you grow your own produce, *you* become responsible for the safety of the food you harvest and feed your family.

From garden to kitchen, there are many chances for harmful bacteria to contaminate your homegrown produce. Water, tools, animals, and manure-contaminated soil are some of the most common culprits.

Bacteria and fungi are a natural part of our environment and can help us to develop good soil and compost. But some, called pathogens, can cause serious and even fatal infections, like Salmonella and E. coli, if they're eaten. The risk of serious illness is higher for young children, pregnant women, older adults, and people with immune-compromising diseases.

So play it – and plant it – safe. Here are some food-safety practices to follow at every step: from planning and working in your garden to harvesting and preparing your produce.

### **Preparing Your Garden**

**Location.** When choosing a location for your garden, you need to consider sun exposure, soil type, moisture, and convenience. Consider food safety, too.

Locate your garden well away from manure piles, compost piles, well caps, garbage cans, septic systems, and animal enclosures, like pastures and corrals. If wildlife or pets roam through your neighborhood, consider fencing your garden to keep them – and their feces – out. Put birdbaths, houses, and feeders in other parts of your yard.

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If you decide to build raised beds, use non-toxic, non-leaching materials. Don't use pressure-treated wood, old railroad ties, or used tires. Chemicals from these can leach into the soil, where they may be absorbed by your crops.

**Water.** Give some thought, too, to what source of water you'll use for irrigation. Water is one of the most likely ways to bring pathogens into direct contact with fresh produce.

Water from municipal sources or well-maintained wells is safest. Surface water (from ponds, lakes, and reservoirs) is least safe. Irrigation methods (like drip irrigation) that minimize contact between water and edible parts of your plants reduce the chance of contamination.

It's a good idea to have well water tested every year for nitrates and bacteria. If you have questions about water quality, contact the county Water Quality Protection District at 457-8927.

**Soil.** Also consider having your soil tested to determine whether it contains harmful chemicals, pesticides, lead, or other heavy metals. For more information, contact the Lewis and Clark County Extension Service, 447-8346.

Residents of East Helena, where soil may be contaminated with lead and arsenic, can contact the health department's Lead Education and Abatement Program about soil tests and safety measures to take while gardening. You can contact the program at 457-8583 or stop by Room 201 of the East Helena City Hall.

**Compost.** Composting is a popular and effective way to add organic matter to the clayey soils we have in Helena and the valley. But bacteria abound in decaying organic matter, and it's hard in our climate to get a compost pile to heat up enough (at least 150 degrees F) to kill any pathogens.

One solution is to spread compost in your garden in the fall, so it has time to break down more fully. Work it down into the soil rather than leave it lying on top.

Don't use animal waste in your compost, and keep animals away from your pile. It's safest to avoid using even composted animal manures.

## **Working in Your Garden**

Personal hygiene and sanitation are essential for gardeners. Not only can you contaminate your garden, but your garden can contaminate you. Some of the products used during gardening, like fertilizers and pesticides, can impact your health.

Here are some tips to post next to your garden workbench:

- Wash hands thoroughly before and after working in the garden. Use a brush to clean your fingernails.
- Wear gloves and close-toed shoes. Remember that you can transfer contamination from one place (like your compost bin) to another on your gloves and footwear.
- Clean tools, gloves, harvest containers, and work surfaces before and after use. After washing with water, disinfect them with diluted bleach (1 tablespoon to 1 gallon of water).

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- Clean decaying matter out of your garden regularly so it doesn't attract animals.
- Follow directions carefully when using pesticides or insecticides. Better yet, contact the Lewis and Clark County Extension Service for information on integrated pest management, which focuses on less toxic methods to control pests.
- Don't work in the garden while sick, especially with diarrhea or vomiting.
- Hose off tools and footwear in an area well apart from the garden.
- Change out of gardening clothes and shoes before entering your kitchen.

## **Harvesting Your Garden**

When all those veggies are ripe and ready to pick, don't let thoughts of a homegrown salad drive food safety from your mind!

- Wash hands before harvesting produce.
- Remove excess soil from produce before taking it into the house.
- Wash produce thoroughly under running tap water that is slightly warmer than the produce. Don't leave veggies sitting in a sink full of water.
- Don't use bleach, soap, or detergent to wash fruits and vegetables. They aren't meant for human consumption.
- Store and prepare fresh produce away from raw meats, poultry, or fish. Store meats, poultry, and fish in deep containers in the refrigerator to keep juices from dripping onto produce in vegetable storage bins.

## **Preparing Your Produce**

Now comes the best part: finding delicious and creative ways to incorporate all those flavorful veggies into your family meals. For some great tips on preparing and preserving your garden bounty, check out the Montana State University Extension Service website: [www.msuextension.org/nutrition/](http://www.msuextension.org/nutrition/)

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